



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8

1595 Wynkoop Street

DENVER, CO 80202-1129

Phone 800-227-8917

<http://www.epa.gov/region08>

APR 06 2009

Ref: EPR-N

Rhonda O'Byrne, District Ranger
Northern Hills Ranger District
Black Hills National Forest
2014 North Main Street
Spearfish, SD 57783

Re: Telegraph Project Area Draft EIS
CEQ # 20090039

Dear Ms. O'Byrne:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) Region 8 has reviewed the *Telegraph Project Area Draft Environmental Impact Statement* (DEIS) concerning the Black Hills National Forest. The EPA reviews EISs in accordance with its responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309 of the Clean Air Act directs EPA to review and comment in writing on the environmental impacts of any major federal agency action. EPA's comments include a rating of the environmental impact of the proposed action and the adequacy of the NEPA document.

The U.S. National Forest Service (USFS) proposes to implement multiple resource management actions within the Telegraph project area. The project area consists of 63,608 acres, of which approximately 56,172 acres are USFS land and approximately 7,436 acres are private land. Proposed actions outlined in the DEIS would apply to USFS land only, with the exception of right-of-ways on private lands.

According to the DEIS, the goals of the project include modification of stand structure to reduce the risk of high intensity wildfires, reduce fuel loads and the risk of mountain pine beetle outbreaks, increase structural and vegetative diversity, and contribute to local and regional economies. The USFS plans on achieving these results through prescribed burning, planting, non-commercial thinning, and commercial timber harvest opportunities. The USFS also proposes to improve maintenance of the road system and reduce existing soil and water damage. In addition to the No Action alternative (Alternative A), the DEIS presents three action alternatives to meet the objectives of the project. A Proposed Action (Alternative B) was modified after the scoping period following an interdisciplinary review and the collection of

additional field data, and two action alternatives (Alternatives C and D) were also developed to address significant issues identified by the public during the scoping period.

According to the DEIS, Alternative B includes a variety of commercial and non-commercial vegetation treatments on approximately 26,045 acres. Commercial treatments are proposed for approximately 22,574 acres, and fuels treatments would be applied to approximately 17,457 acres. As a result of these proposed activities, an estimated 78 miles of new National Forest System (NFS) road would be constructed, and 28 miles of current unclassified roads would be added to the NFS. This action would also necessitate the use of approximately 160 miles of existing roads that would need to be repaired or reconstructed depending on the current condition.

Alternative C is a modification of Alternative B to address concerns about the potential impacts of the proposed action on scenery, habitat for the American marten, non-motorized and other primitive recreation experiences, the retention of forest stands in structural stage 5, the number of roads in Management Area (MA) 4.1 and 5.1, and vegetative diversity. This alternative would treat a total of 31,454 acres, would incorporate 40 miles of new roads, 23 miles of unclassified roads, and 161 miles of existing NFS roads would require some level of maintenance. No new roads would be constructed in MA 4.1.

Alternative D includes modifications included in Alternative C along with additional modifications including additional treatments to deter the spread of known beetle infestations and limiting roads in MA 4.1 to provide opportunities for non-motorized recreation. This alternative would treat a total of 34,583 acres, would incorporate 50 miles of new roads, 25 miles of unclassified roads, and 168 miles of existing NFS roads would require some level of maintenance. Additionally, in order to access some proposed treatment areas in MA 4.1, helicopter logging is planned which would necessitate the construction of seven 3-acre helicopter landings.

Based on the document review, EPA is primarily concerned with the potential impacts to water quality and wildlife habitat due to road development. EPA's major concern is that this project is moving forward prior to the completion of the Forest-wide Travel Management Plan. The DEIS stated that one commenter requested an alternative to be developed to decommission as many miles of roads as possible within the project area. However, the alternative was not considered due to the delay in a final travel management plan. If decommissioning decisions are postponed, it would be prudent for the USFS to delay the selection of an alternative until the travel plan is completed and all options are properly vetted, including the decommissioning of roads. Furthermore, EPA is concerned with the proposed major expansion of the transportation network, with up to 106 miles of added NFS, when impacts of the existing network have not been analyzed in the final travel management plan. EPA supports eliminating or minimizing new road construction because roads contribute to increased stream siltation, mass movement and erosion, damaged plant habitat and increased wildlife habitat fragmentation. Adequate analysis cannot be conducted on the potential impacts of this project until sufficient information is disclosed regarding road decommissioning.

The DEIS also lacks information and specificity regarding implementation parameters for applying adaptive management prescriptions to vegetation treatments. EPA recommends that the EIS include a decision tree with clear objectives to guide future decisions, targets/thresholds that specify a desired future condition, a monitoring plan with protocols to assess whether thresholds are being met, and a commitment to use monitoring results to modify management actions. Additional information on adaptive management is included in the Detailed Comments section of this letter.

In general, the DEIS is well organized with a clearly presented comparative analysis of the proposed action and alternatives. EPA commends the USFS for its responsiveness to the public by developing action alternatives as a result of significant issues raised during the scoping period. EPA also appreciates that the Proposed Action was modified following an interdisciplinary review and the availability of new field data collected following the scoping period so that the most accurate, up-to-date information is presented in the DEIS. Also, the maps included in the DEIS are extremely detailed in regard to locations of vegetation treatments by type, locations of water resources, and mapping of proposed road construction by alternative within the project area. These visual aids are particularly helpful when comparing and analyzing alternatives. However, it may also be beneficial to overlay watersheds on transportation system maps so that impacts to water resources through road development are more visually transparent.

EPA's role is to evaluate the potential effects of proposed actions and the adequacy of the information in the DEIS. We rate this DEIS an "EC-2" (environmental concerns, insufficient information) as outlined in EPA's enclosed ratings criteria. The EC rating indicates that the reviewer has identified environmental impacts that should be avoided in order to adequately protect the environment. We also recommend additional analysis and information to fully assess and mitigate all potential impacts of the management actions. A complete description of EPA's EIS rating system is enclosed, as well as detailed comments used to determine the project's rating.

We appreciate the opportunity to participate in the review of this project, and look forward to resolving these matters prior to the issuance of the Final EIS (FEIS). If we may provide further explanation of our concerns during this stage of your planning process, please contact me at 303-312-6004, or Melanie Wasco of my staff at 303 312-6540.

Sincerely,

A handwritten signature in dark ink, appearing to read "Larry Svoboda (acting)".

Larry Svoboda
Director, NEPA Program
Ecosystems Protection and Remediation

Enclosures

Detailed Comments by the US EPA R8
Telegraph Project Area Draft EIS
Black Hills National Forest
Northern Hills Ranger District

Water Quality and Wildlife Habitat

The DEIS reports that the South Dakota Department of Environment and Natural Resources (State) assigns water quality standards on the beneficial uses of each water body. Such beneficial uses include irrigation, fish and wildlife propagation, recreation, and stock watering. There are 25 streams located within the Telegraph project area that the State has assigned additional beneficial uses, 15 of which are identified as "major streams" and listed in Table 3-39 on page 263 of the DEIS.

The majority of the Telegraph project area is within Condition Class II watersheds, which are those "which may have streams and soils in disequilibrium" and "a change in the rate or nature of management activity or minor structural projects should be able to return these watersheds to a Class I condition" (page 265). According to the DEIS, Elk Creek watershed is the only Condition Class III in the project area where management activities can still occur, however activities which will improve the health of the watershed must be a part of the project planning. Under Alternative B, two unclassified routes that have four Connected Disturbed Areas (CDAs) on an Elk Creek tributary would be added to the National Forest road system, and thus the USFS "would repair the road so that it would no longer be a provider of sediment into the stream" (pages 283-284). However, construction activities and extended use of the road system may contribute to sediment impacts into the tributaries. These impacts should be disclosed in the DEIS. Requirements for management activities to occur in Class III watersheds are outlined on pages 265 and 266 and include:

- the activities do not degrade the watershed further,
- the activities demonstrate that watershed improvement is targeted by successfully eliminating some of the existing CDA currently known to occur within the project area,
- that activities and project design show overall improvement,
- and that watershed improvement project needs are identified during the project data gathering or planning process, and that if feasible, those activities can be considered for inclusion within the proposed actions for the project area.

According to the Proposed Alternative, Alternative B, approximately 16 new stream crossings would be created from roads of which 15 crossings would be caused by existing unclassified roads and one crossing would be the result of new construction. Of the 15 crossings, nine new road crossings would cross intermittent and perennial streams (compared to three for Alternatives C and D), and seven would cross ephemeral streams. Additionally, page 287 of the

DEIS states that one perennial stream crossing is planned for Alternative B that has the potential of increasing the number of CDA within the project area. EPA is concerned that these impacts are not consistent with the requirements stated above, and there is not sufficient mitigation proposed to offset those impacts.

Although implementation of the Watershed Influence Zone in the Telegraph project area creates a buffer of 100 feet minimum from each bank of perennial and intermittent streams, lakes and wetlands, the DEIS states that this “would allow stream banks to remain generally undisturbed from proposed activities except at existing and proposed new road crossings” (page 285). Therefore, EPA recommends that proposed new road crossings should be avoided.

Additionally, Alternative B proposed 29 miles of new road construction in MA 4.1, an area that is designated as “limited motorized use and forest product emphasis” (page 309). The DEIS goes on to state that these new routes may or may not be closed following management activities depending on the determination of the upcoming Forest-wide Travel Management Plan. Creating new roads in MA 4.1 appears to be inconsistent with the 1997 Forest Plan as amended in 2005. Future impacts are also unclear regarding this area since the travel management plan is still being developed.

EPA strongly recommends that the total miles of proposed roads and the impacts from road construction be thoroughly considered prior to selecting a final alternative, especially those areas involving stream crossings. For road construction under the proposed alternative, EPA’s general recommendations include:

1. Minimize road construction and road density to reduce adverse impacts to watersheds;
2. Locate roads away from streams and riparian areas as much as possible;
3. Locate roads away from steep slopes or erosive soils;
4. Minimize road stream crossings;
5. Stabilize cut and fill slopes;
6. Provide adequate road drainage and control surface erosion with adequate waterbars, crowns, rolling dips and ditch relief culverts to promote drainage off roads or along roads;
7. Consider road effects on stream structure and seasonal spawning habitats when determining alignment; and
8. Allow for adequate large woody debris recruitment to streams and riparian buffers near streams.

Soil erosion and water quality.

The EPA appreciates the qualitative evaluation of soil erosion, sedimentation, and overall water resource quality on the National Forest. The Draft EIS projects no serious concerns about soil erosion and water quality or potential impacts from the proposed actions to additional runoff, erosion, and sediment to streams and other water resources such as riparian areas. Given the extensive acres of vegetation treatments proposed under Alternative B, EPA has some concerns about water quality because of significant land disturbance and potential erosion and runoff from

extensive harvesting and other activities, in conjunction with the high road density in the project area. Combined with habitat reductions in ponderosa pine, the high density of roads and their stream crossings contribute to concerns about wildlife habitat and its fragmentation, and wildlife disturbance or mortality. Additionally, a description and map of the slope and soil types/erosivity in the proposed treatment area would be beneficial to include in Appendix A. This would assist in the analysis of expected sediment load to aquatic habitats from project activities

EPA encourages the Forest Service to fully describe in the FEIS the watershed restoration activities they will undertake to mitigate for project-related impacts. Wherever possible, EPA recommends the USFS take action to reduce the likelihood of negatively impacting water quality.

Adaptive Management Procedures

The DEIS presents very general information regarding the implementation of adaptive management strategies in a few sections, but the procedures are not sufficiently developed. For example, there is a reference on page 337 under the Wildlife heading that states, "Monitoring conducted at the Forest level would be applied to allow for adaptive management of the resources to protect long-term productivity." When discussing noxious weed treatment, the DEIS states that monitoring will be conducted following all ground disturbing activities as well as follow-up annual monitoring. However, overall adaptive management is discussed in very general terms without specifics on monitoring frequencies or threshold values that would assist in determining the effectiveness of the selected action in meeting the objectives of the proposed project.

In instances where the responsible agency can lay out thresholds and decision trees to guide future decisions, EPA supports the use of adaptive management. Without such thresholds and management options, adaptive management is not substantially different from traditional management. True adaptive management can reduce the need for future NEPA actions, or at least reduce the scope of future NEPA decisions. We offer several specific suggestions with respect to adaptive management that should be included in the FEIS:

- 1) The USFS should include threshold values that would be protective of air quality, visibility, aesthetics (noise), water quality, and wildlife impacts. These thresholds would represent the minimum desired conditions in the analysis area. These thresholds would be the trigger points that would determine when additional management decisions (potentially including NEPA) are necessary. We believe that these thresholds can be set in this EIS based on existing information and the expertise of USFS science and management staff, and that there is no reason to defer the disclosure of threshold values to some later date.

- 2) Ideally, this management plan would not only identify the thresholds, but would also discuss and identify management alternatives and mitigation that would be implemented should a threshold be exceeded. Inclusion of thresholds and management alternatives in this EIS would reduce or eliminate the need for additional NEPA involvement regarding this issue in the near future.

3) The FEIS should provide assurance that funding is secured for the adaptive process, including for additional NEPA analysis if needed. If this funding is lost, or the required monitoring does not happen for any reason, the FEIS and ROD should include a specific, environmentally conservative course of action that will ensure full protection of forest resources.

4) The FEIS should include more detail on the proposed adaptive management process including the mechanisms for public disclosure of the analysis and the decisions. The roles of the USFS, other agencies, independent science, and the public should be clearly stated. The FEIS should discuss any future decision points in this adaptive process that would require NEPA analysis.

EPA encourages the Ranger District to incorporate technical guidance from the U.S. Department of Interior regarding adaptive management practices into the FEIS. This guidance can be found at: <http://www.doi.gov/initiatives/AdaptiveManagement/TechGuide.pdf>

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements

Definitions and Follow-Up Action*

Environmental Impact of the Action

LO - - Lack of Objections: The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC - - Environmental Concerns: The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO - - Environmental Objections: The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU - - Environmentally Unsatisfactory: The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 - - Adequate: EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 - - Insufficient Information: The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 - - Inadequate: EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.

